## Scleral Foreign Body Mimicking Episcleritis

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Case 1: A 28 year old male, presented with complaints of localised area of redness in the palpebral conjunctiva of left eye associated with foreign body sensation since one month. Visual Acuity in both eyes was 20/20 with brisk pupillary reaction in both eyes. Slit lamp examination of left eye showed a well defined subconjunctival nodule measuring

5mmx3mm in the superonasal quadrant (Figure 1a). Anterior chamber was quiet. Posterior segment evaluation was normal. Right eye examination was WNL. There was no history of trauma. A provisional diagnosis of episcleritis was made. Complete blood count with ESR, chest x-ray and Mantoux test were done to rule out tubercular infection. The patient was started on low dose topical steroids. No decrease in size of nodule was observed after 2 weeks. On repeat evaluation there was a high suspicion of an occult foreign body. X-ray orbit revealed a linear opacity in the superonasal quadrant. On repetitive questioning, patient gave history of some foreign body falling in left eye, one month ago. CT Scan was done and foreign body was confirmed lying in the superficial ocular coat in the superonasal quadrant (Figure 1b). On globe exploration (Figure 1c) an iron piece was found embedded deep in sclera. A 5mmx3 mm iron foreign body was removed (Figure 1d) and scleral suturing was done with 8-o nylon. Post operatively patient was given topical steroids and antibiotics. Follow-up was uneventful.



Figure 1a



Figure 1b



Figure 1c

Figure 1d

Case 2: A 13 year old male presented with localised swelling in the left eye associated with pain since one month. Visual Acuity

in both eyes was 20/20. Slit lamp examination showed a painless, paralimbal swelling temporally at 3'o clock. Anterior chamber was quiet and rest of the examination was within normal limits. Right eye examination was WNL. A provisional diagnosis of nodular episcleritis was made and the patient was started on low dose topical steroids. Complete blood count with ESR, chest x-ray and Mantoux test were done to rule out tubercular infection.No relief of symptoms was observed after 2 weeks. All the investigations were within normal limits. A suspicion of foreign body was made and ultrasound biomicroscopy (Figure 2a) was done which revealed a subconjunctival hypo echoic lesion with hyper echoic centre in outer scleral layers. CECT brain was ordered to rule out neurocysticercosis, but scans had no significant findings. On persistent questioning, to revise the diagnosis, patient gave history of trauma with wooden pencil one month ago. Globe exploration was done (Figure 2b, 2c). We removed a wooden foreign body 4mmx2mm in size, partially embedded in the scleral coats from the superotemporal quadrant (Figure 2d). Follow-up was uneventful.





## Discussion:

Figure 2d

Episcleritis is a benign, recurrent condition affecting females predominantly, presenting as diffuse or nodular form, with common complaints of redness, pain, foreign body sensation, lacrimation and with or without nodule formation. Visual acuity is usually maintained.<sup>1,2</sup> It is usually self limiting and mostly idiopathic in nature but can be an indicator of underlying systemic disease (autoimmune).Redness can be diffuse or localised depending on the type of episcleritis with a well circumscribed, elevated, mobile lesion in the cases of nodular episcleritis.<sup>3,4</sup> Differential diagnosis includes conjunctivitis, phlycten, foreign body granuloma, scleritis etc.

The reported cases highlight the importance of a thorough history taking and retrograde analysis of diagnosis and treatment, especially if the patient's response to the medication is unsatisfactory. A meticulous slit lamp examination can be helpful in directing a localized sign, in presentations with multiple differential diagnoses, towards a particular diagnosis. As in our cases, a partially embedded foreign body in the coats of the eye can easily mimic the presentation of nodular episcleritis. Hence, it is important to consider even if, in the initial history the patient negates any trauma. Episcleritis normally responds to the treatment in 2-21 days<sup>5</sup> but in cases where the response is poor, one should consider foreign body as a strong differential and proceed with other ancillary investigations to rule out this possibility.

## **References :**

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